

# Winthrop Beach Shore Protection Winthrop Shore Drive Improvements - Update -

#### **DCR Public Meeting**

Tuesday, May 17, 2016 – 6:30pm – 8:30pm Robert A. DeLeo Winthrop Senior Center – Council on Aging 35 Harvard Street, Winthrop, MA 02152



## Commonwealth of Massachusetts

Governor

Charles D. Baker

Lieutenant Governor

Karyn E. Polito

Energy and Environmental Affairs Secretary

Matthew A. Beaton

Department of Conservation and Recreation Commissioner

Leo P. Roy





### **DCR Mission Statement**

To protect, promote and enhance our common wealth of natural, cultural and recreational resources for the well-being of all.

## **Tonight's Meeting - Purpose**

- 1. Update on beach re-grading activities
- 2. Update on beach monitoring activities
- 3. Discussion of concrete stair repair work
- 4. Discussion of scope of ongoing engineering Peer Review
- 5. Plans for future public meetings
  - May 31, 2016
    - Present the results of the engineering Peer Review of Winthrop Beach Shore Protection Design
  - June, 2016
    - Present update on Winthrop Beach shore protection
    - Present, and gather public input on, proposed 100% design plans for Winthrop Shore Drive/upland improvements
  - September, 2016
    - Present update on Winthrop Beach shore protection
    - Present final design and construction plans for Winthrop Shore Drive/upland improvements
- 6. Public comments



## May 2016 - Cobble Berm Re-grading





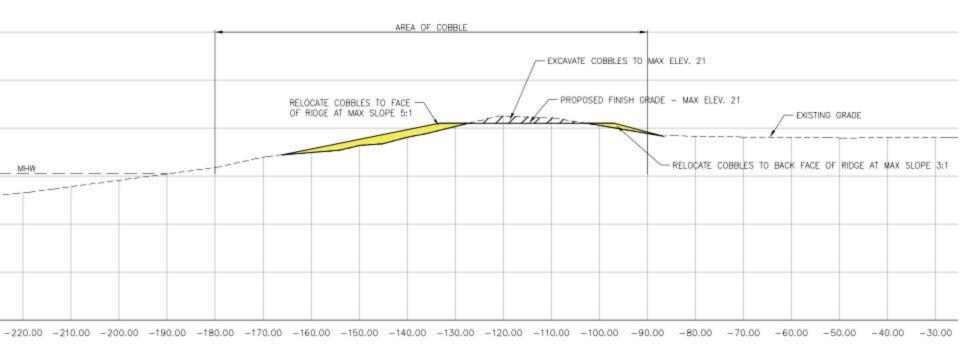
## Goal of Cobble Berm Re-grading

Improve pedestrian access without:

- Compromising shore protection
- Impacting existing sandy areas.

## **Re-Grading Plan**

- Reduce height of the berm
- Flatten steep slopes
- Keep the cobble within its existing footprint
- Complete the work by Memorial Day.





March 2016: Sand reforming below cobble



## Tracking the Beach's Performance

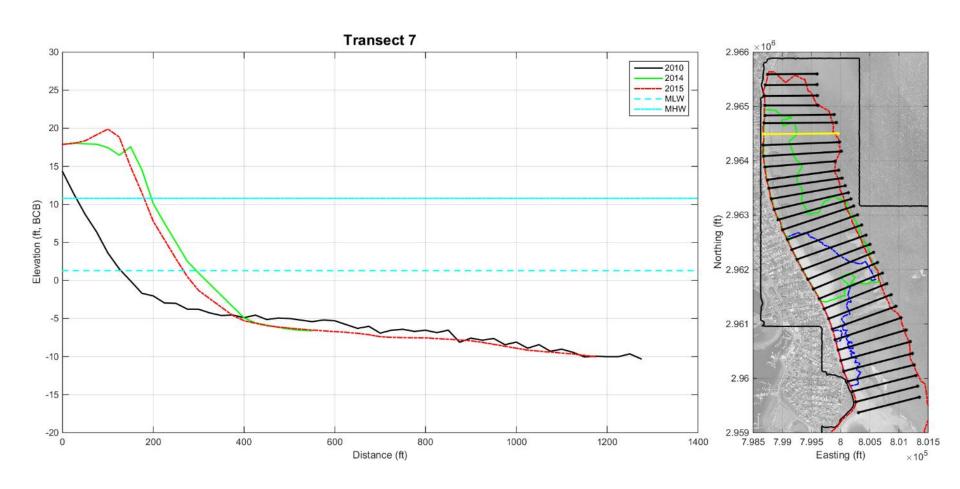
#### Permit Requirements:

- As-built surveys every quarter
- Annual report.

#### As-built surveys performed to date:

- •August 2015
- November 2015
- •March 2016.

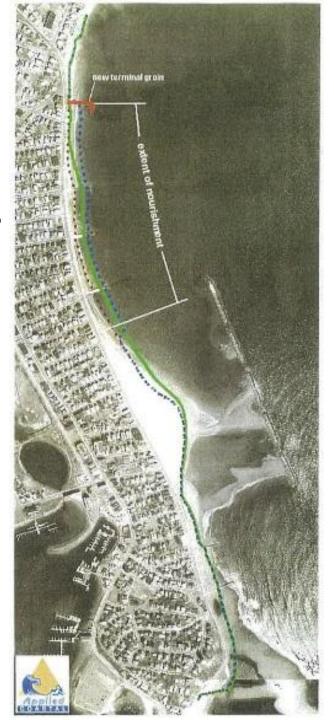
## Winter Storms and Wave Action Are Sorting the Fill and Reshaping the Beach Profile





### **Preliminary Monitoring Results**

**Storms and Tides are Redistributing Fine Particles** 





## **Preliminary Erosion and Accretion Data**

Annual Beach Volume Lost from the North and South Sections of the Beach (Approx. 37,000 cubic yards)

Annual Volume Gained at the Tombolo (Approx. 37,000 cubic yards)

#### IN SUM:

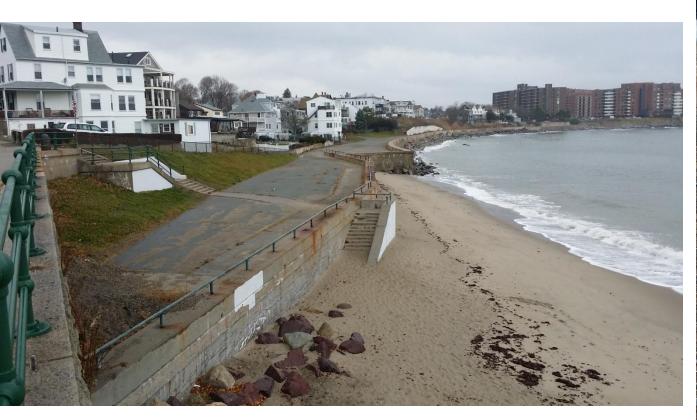
Though re-nourishment material is being sorted and relocated, little has been lost to the sea.



March 2016: Sand Accretion Behind the Five Sisters

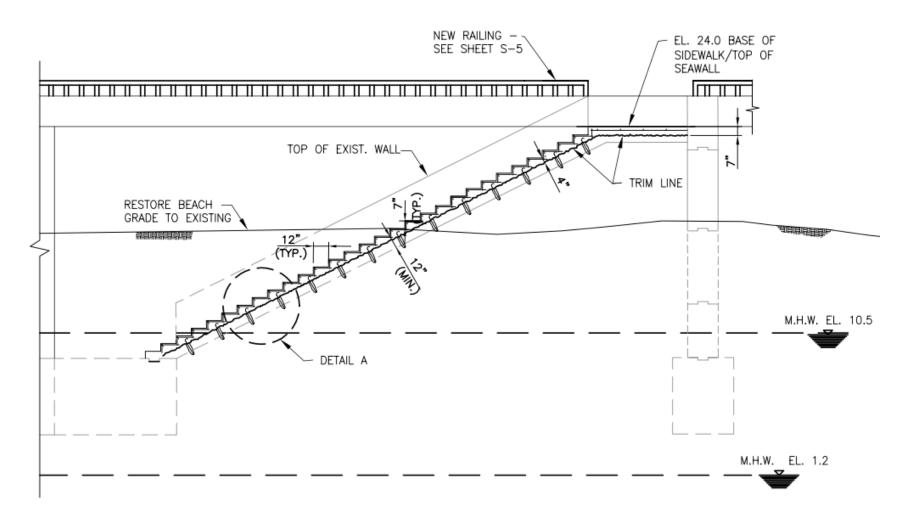


## Spring 2016 Repairs to the Highlands Sea Wall Stairs





## Spring 2016 Repairs to the Highlands Sea Wall Stairs





## **Engineering Peer Review**

## <u>Purpose</u>: To determine if the project was designed and built in accordance with sound coastal engineering practices

DCR Selected Tetra Tech as Peer Review Consultant.

### Scope of Work:

- Review Winthrop Beach coastal engineering work
  - Past studies and engineering reports
  - Environmental permits
  - Construction documents
  - Perform site inspection.
- Prepare and present report on independent review
  - Presentation May 31, 2016.



## **Engineering Peer Review – Partial List of Reports**

#### **Reports and Studies:**

- •Investigations of beach erosion problems at Revere, Winthrop, and Nantasket Beaches (1973)
- •Plan for the Future of Boston Harbor Beaches (1993)
- •MDC Winthrop Shores Reservation Restoration Report (1999)
- •Winthrop Shores Reservation Program Conceptual Shore Protection Design (2000)
- •Winthrop Shores Reservation Restoration Program Alternatives Analysis (2002).

#### **Permits and Applications:**

- •Final Environmental Impact Report (2005)
- Notice of Project Change (2011)
- Winthrop Beach Order of Conditions
- •US Army Corps of Engineers Permit (2012).

#### **Construction Documents:**

- Southern re-nourishment plans and specifications (2013)
- Northern re-nourishment plans and specifications (2013).



## **Future Public Meetings**

#### May 31, 2016

- Present results of engineering Peer Review June 2016
  - Present update on Winthrop Beach shore protection
  - Present, and obtain input on, proposed 100% design plans for Winthrop Shore Drive/upland improvements.

#### September 2016

- Present update on Winthrop Beach shore protection
- Present final design and construction plans for Winthrop Shore Drive/upland improvements.



### **Additional Information**

#### For more information:

http://www.mass.gov/eea/agencies/dcr/public-outreach/public-meetings/ http://www.mass.gov/eea/agencies/dcr/conservation/planning-and-resourceprotection/projects/winthrop-beach-renourishment-project.html

#### If you have comments or suggestions on this project:

Submit online:

http://www.mass.gov/eea/agencies/dcr/public-outreach/submit-public-comments/

Write: Department of Conservation and Recreation Office of Public Outreach

251 Causeway Street, Suite 600

Boston, MA 02114

Note: Public comments submitted to DCR may be posted on the DCR website in their entirety.

If you have questions or concerns or wish to subscribe to a DCR general information or project-related listserv: contact DCR's Office of Community Relations at 617-626-4973 or <a href="Mass.Parks@state.ma.us">Mass.Parks@state.ma.us</a>.



## **Public Comments**